

METHOD AND APPARATUS FOR PERFORMING CRITICAL TASKS USING SPECULATIVE OPERATIONS

ABSTRACT OF THE DISCLOSURE

5 Method and apparatus for performing a critical task using a load
that is speculative. Specifically, a method of computation for performing
critical tasks with speculative operations is described in one embodiment.
The critical task is performed to achieve a first result while a condition of
a processor used to perform said critical task is unknown. In parallel, the
10 condition of the processor is determined. If the condition is as expected,
then the first result is committed. If the condition is not as expected, then
the condition is fixed to be as expected. The first result benignly fails.
Also, the critical task is re-performed using the operation that is
speculative resulting in a second result. The second result is then
15 committed.